

ABSTRACT OF THE DISCLOSURE

A first housing 14 is provided with a first and a second terminals 11a, 11b to be connected with a first and a second external antennas. A second housing 13 is connected via a coaxial cable 9 with the first housing 14. The first housing 14 includes a switch 10 connected via a capacitor 3b with the coaxial cable, for selectively connecting one of the first and second terminals 11a, 11b which provides higher receipt sensitivity on the basis of a switching signal and a DC power supply 12 connected via an inductance 4b to the coaxial cable 9. The second housing 13 includes a radio circuit 2 connected via the capacitance 3a with the coaxial cable 9, for processing a radio signal to be transmitted, supplying the processed radio signals to the first or second internal antenna 7 or 8 and processing the received radio signal. A control circuit 1 is connected via the inductance 4a to the coaxial cable 9 for outputting the switching signal on the basis of the received signal level by the external antenna and an inductance connected between the coaxial cable and a circuit required to be supplied with the DC power supply. Thus the radio signal is transmitted/received and the DC power is supplied via the coaxial cable 9.